222 HARTREY AVE., EVANSTON, IL, 60204 U.S.A. AREA CODE 312/866-2200 ● CABLE: SHUREMICRO

TWX: 910-231-0048 TELEX: 72-4381

MICROPHONES AND ELECTRONIC COMPONENTS

DATA SHEET

MODEL VR300

UNIDIRECTIONAL DYNAMIC MICROPHONE



GENERAL

This microphone is designed especially for use in computer voice recognition applications. It is also suitable for other uses such as paging, talkback, and other communication-type applications where excellent voice fidelity and reduction of background noises are needed.

The frequency response is tailored to produce an essentially constant output voltage over the voice spectrum when used close to the sound source. The transducer is a low-impedance, moving coil type with integral humbucking coil.

The microphone case is aluminum with a black enameled finish. It has a standard %"-27 thread suitable for mounting on a flexible gooseneck, fixed pipe, or microphone stand. The unit is supplied with an attached two-conductor shielded cable with a built-in strain relief.

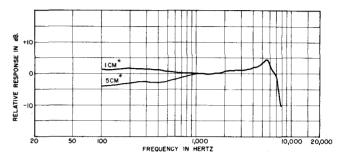
SPECIFICATIONS

Type

-Dynamic, Unidirectional (cardioid), Close-Talking

Frequency Response

100 to 7,000 Hz (see Figure 1)



*Distance from lips to microphone grille
TYPICAL FREQUENCY RESPONSE
FIGURE 1

Impedance

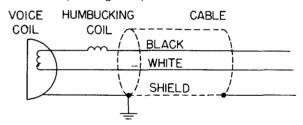
170 ohms actual

Output Level

*0 dB = $1V/100 \mu bar$ **0 dB = $1 \text{ mW}/10 \mu bar$

Phasing

Positive pressure on diaphragm produces positive voltage on white conductor with respect to black conductor (see Figure 2)



INTERNAL CONNECTIONS FIGURE 2

Hum Pickup

Maximum 15 dB equivalent SPL in 1 m0e field

Cable

1.2m (4 ft) two-conductor shielded

Case

Aluminum with black enameled finish; stainless steel screen

Dimensions

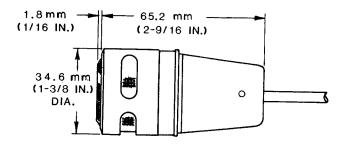
See Figure 3

Net Weight

128 grams (4.5 oz)

OPERATION

To obtain the best performance with the VR300, the microphone must be used in a close-talking manner. The lips should be as close to the microphone grille as comfort permits, with a distance of 1 to 5 cm (0.4 to 2 in.) providing the greatest discrimination between voice and background noise.



OVERALL DIMENSIONS FIGURE 3

ACOUSTIC CONSIDERATIONS

The close-talking characteristics of the VR300 Microphone are obtained through its tailored frequency response, directionality, and distance discrimination. The acoustical elements are designed to optimize performance in the frequency range of 100 to 7,000 Hz. This results in substantial reduction of sounds outside the desired range and proper control of sounds within the desired range. The microphone rejects noise through its

inherent directional properties, and it discriminates against unwanted sounds arriving from a distance in favor of sounds arriving from a near source.

GUARANTEE

This Shure product is guaranteed in normal use to be free from electrical and mechanical defects for a period of one year from date of purchase. Please retain proof of purchase date. This guarantee includes all parts and labor this guarantee is in lieu of any and all other guarantees or warranties, express or implied, and there shall be no recovery for any consequential or incidental damages.

SHIPPING INSTRUCTIONS

Carefully repack the unit and return it prepaid to:

Shure Brothers Incorporated Attention: Service Department 222 Hartrey Avenue Evanston, Illinois 60204

If outside the United States, return the unit to your dealer or Authorized Shure Service Center for repair. The unit will be returned to you prepaid.